

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) An optical rotary encoder, comprising:
a rotary slit plate having a rotation angle detection track including an optical slit;
a light source for applying light to said optical slit;
light receiving elements for rotation angle detection arranged in corresponding relationship with positions to which light emitted from said light source is applied to said optical slit, thereby receiving the light emitted from said light source and passing through said optical slit; and

first and second light receiving elements for light amount monitoring arranged at respective locations on a circumference in corresponding relationship with positions at which light emitted from said light source is applied to said optical slit, and receiving the light emitted from said light source and passing through said optical slit, wherein

each of said first and second light receiving elements for light amount monitoring ~~have~~ has an angular width that is an integer multiple of an angular interval of light intensity distribution, on surfaces of said first and second light receiving elements for light amount monitoring, of the light emitted from said light source and that has passed through said optical slit, and

said first and second light receiving elements ~~of said light receiving elements~~ for light amount monitoring are arranged on a circumference in corresponding relationship with positions at which the light emitted from said light source is applied to said optical slit, and said first and second light receiving elements for light amount monitoring are located 180 degrees from each other with respect to a center point of the circumference, thereby reducing variations of signals from said first and second light receiving elements for light amount monitoring that are caused

by deviations of the light intensity distribution and deviations of said first and second light receiving elements for light amount monitoring in a radial direction with respect to a center of said rotary slit plate.

Claims 2-4 (Cancelled).

5. (Currently Amended) The optical rotary encoder according to claim 1, wherein first and second ends of said first and second light receiving elements for light amount monitoring, in the radial direction, are arranged within a width dimension, in the radial direction, of light emitted from said light source and that has passed through said optical slit in a distribution of the light ~~formed-incident~~ on surfaces of said first and second light receiving elements for light amount monitoring.

6. (Currently Amended) The optical rotary encoder according to claim 1, ~~wherein including~~ third and fourth light receiving elements ~~of said light receiving elements~~ for light amount monitoring ~~are~~ arranged on a circumference in corresponding relationship with positions at which light emitted from said light source is applied to said optical slit, ~~and wherein~~ said third and fourth light receiving elements for light amount monitoring are spaced at an interval of $(\text{odd number } 2n + 1 / 2)$ of the angular interval of the light intensity distribution, wherein n is zero or an integer.

7. (Currently Amended) The optical rotary encoder according to claim 1, wherein first and second ends of said first and second light receiving elements for light amount monitoring, in the radial direction, are arranged outside a width dimension, in the radial direction, of light emitted from said light source and that has passed through said optical slit in a distribution of the light ~~formed-incident~~ on surfaces of said first and second light receiving elements for light amount monitoring.

8. (New) The optical rotary encoder according to claim 6, wherein each of said third and fourth light receiving elements for light amount monitoring has an angular width that is an integer multiple of the angular interval of light intensity distribution, on surfaces of said third and fourth light receiving elements for light amount monitoring, of the light emitted from said light source and that has passed through said optical slit.

9. (New) The optical rotary encoder according to claim 1, wherein each of said first and second light receiving elements for light amount monitoring has an angular width that is an integer multiple, larger than one, of the angular interval of the light intensity distribution on the surfaces of said first and second light receiving elements for light amount monitoring, of the light emitted from said light source and that has passed through said optical slit.

10. (New) The optical rotary encoder according to claim 6, wherein each of said third and fourth light receiving elements for light amount monitoring has an angular width that is an integer multiple, larger than one, of the angular interval of light intensity distribution, on surfaces of said third and fourth light receiving elements for light amount monitoring, of the light emitted from said light source and that has passed through said optical slit.